

FIFTH-ANNIVERSARY SPECIAL THE CLASSIC WOODY

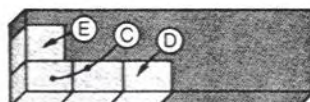
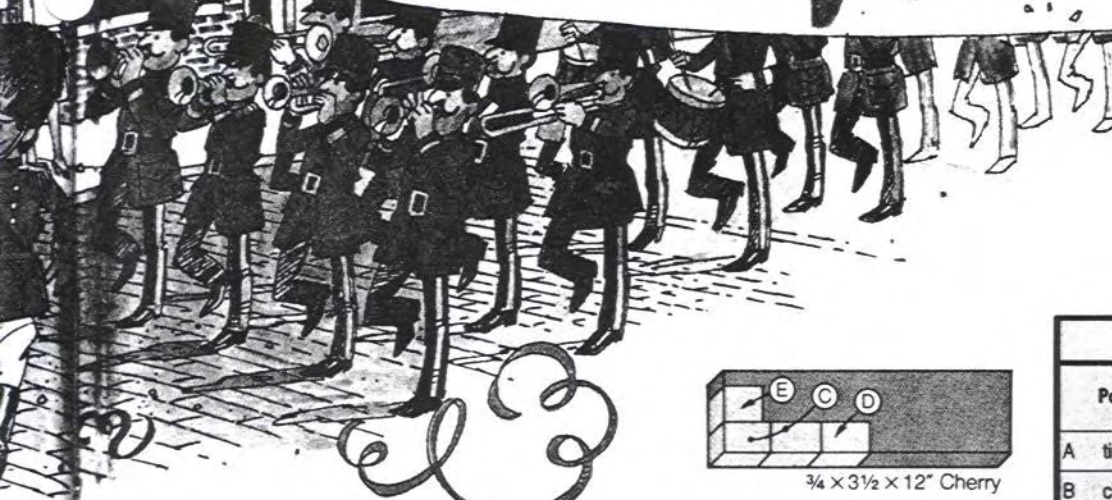
Help us celebrate WOOD® magazine's fifth anniversary in grand fashion by building our classic Woody. Once you've crafted this collector's item—reminiscent of a 1930 Ford Woody—send us a photo of the completed model, and we'll send you, free of charge, a ½ × 1" engraved brass license plate, like the one offered on page 76. We've numbered them sequentially, so get started right away and receive a low number.

Note: You'll need thin stock for this project. You can either plane or resaw stock to the thickness stated in the Bill of Materials. Or, see the Buying Guide on page 77 for our source. You'll find helpful suggestions in our "Working Small" article, starting on page 50, when working with the small car parts.

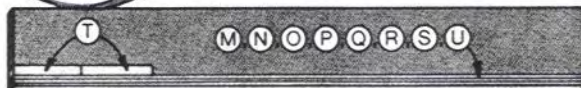
THE WHEELS START THE ASSEMBLY LINE ROLLING
Note: We found it best to build the wheels and add them to the chassis now for ease in positioning the fenders on the chassis in the next section. See the Buying Guide for our source of laser-cut spoked rims.

- 1** Cut a piece of ¼"-thick walnut to 2½" wide by 15" long (enough material for six tires—an extra tire in case one breaks during machining). Now, cut a piece of ½" or ¾" scrap stock to the same length and width as the walnut.
- 2** Cover the bottom side of the walnut with double-faced tape, and stick the walnut to the scrap block with the edges and ends flush. Mark reference lines on the walnut for locating the wheel centerpoints where dimensioned on Step 1 of the drawing titled Cutting The Tires on the opposite page.
- 3** Mount a circle cutter in your drill press, and follow the two-step

5th Anniversary Celebration



3/4 x 3 1/2 x 12" Cherry

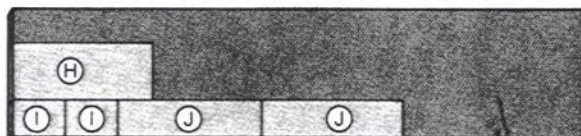


1/8 x 3 1/2 x 24" Maple

Cutting Diagram



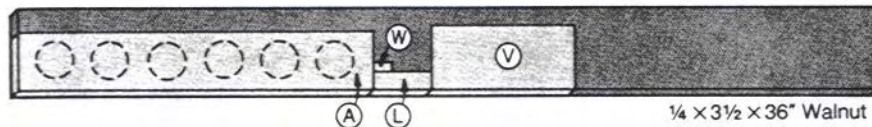
1/4 x 3 1/2 x 6" Maple



1/8 x 5 1/2 x 24" Cherry



3/4 x 3 1/2 x 36" Walnut



1/4 x 3 1/2 x 36" Walnut

CUTTING THE TIRES

STEP 1

1/4 x 2 1/2 x 15" walnut

Circle cutter

1 3/4" diam.

Position cutter as shown

Reference lines

Scrap block

Use double-faced tape to adhere walnut to scrap block.

STEP 2

Position cutter as shown.

A

3/16"

R = 1 1/16"

Part	Finished Size*			Ment.	Qty.
	T	W	L		
A tires	1/4"	1 3/4" diameter	W	5	
B chassis	1/2"	2 1/2"	7 3/4"	W	1
C* side panels	1 1/2"	1 1/4"	2"	LC	1
D* hood	1/4"	1 1/2"	2"	C	1
E cowl	3/4"	1 1/2"	2 1/2"	C	1
F* fenders	3/4"	1 3/4"	8 1/2"	W	2
G radiator	1/4"	1 1/8"	1 3/4"	M	1
H floor	1/8"	2 1/2"	6"	C	1
I firewall, tailgate	1/8"	1 1/2"	2 1/4"	C	2
J side panels	1/8"	1 1/2"	6"	C	2
K seat	1/2"	3/4"	2 1/4"	W	1
L seat back	1/4"	1 1/2"	2 1/4"	W	1
M trim	1/8"	1/8"	7 7/8"	M	2
N trim	1/8"	1/8"	1 1/4"	M	2
O window posts	1/8"	1/8"	2 3/4"	M	12
P trim	1/8"	1/8"	6"	M	2
Q trim	1/8"	1/8"	2 1/2"	M	4
R trim	1/8"	1/8"	1 3/8"	M	8
S trim	1/8"	1/8"	2 1/2"	M	1
T trim	1/8"	1/4"	3"	M	2
U trim	1/8"	1/8"	2 1/4"	M	4
V roof	1/4"	2 3/4"	6 1/8"	W	1
W license block	1/4"	1/4"	3/4"	W	1

*Initially cut * parts oversized. Trim them to finished size according to the how-to instructions.
Material Key: W-walnut, LC-laminated cherry, C-cherry, M-maple
Supplies: double-faced tape, 1/4" walnut dowel stock for axles, 1/8" birch dowel stock for light bar, 1/2" birch dowel stock for headlights, masking tape, finish.

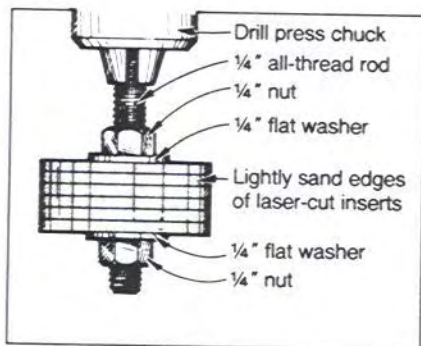
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THE CLASSIC WOODY

drawing to cut the walnut tires to shape. Note the position of the cutter in each step.

4 To avoid breaking the tires when removing them from the scrap block, splash a little lacquer thinner over each tire to weaken the tape adhesive. Then, carefully pry the tires from the tape. Hand-sand a slight round-over on the inside and outside edges of each tire.

5 To smooth the outside edges of the rims—they're a little rough from the laser cutting—fasten them to a 6" length of 1/4" all-thread rod. Chuck the assembly into your drill press as shown in the drawing below. Using a sanding block, *lightly* sand the outside edges smooth; be careful not to sand too much. Remove the rims from the rod.

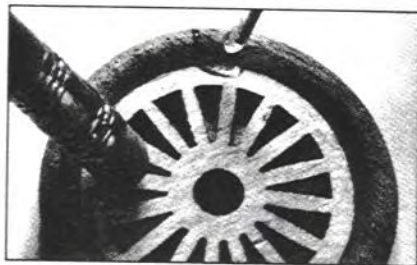


6 To adhere the rims to the tires, position one of the tires on a flat surface. Place a 1/4" washer inside the tire, and lay a rim on the washer. Apply a few drops of instant glue to adhere the tire to the rim as shown in the photo at top of the next column. (We used a pencil to center the rim inside the wheel when gluing.) Repeat for each wheel. (We found instant glue helpful to avoid problems adhering the small parts.) See the Buying Guide for our source of glue.

7 Cut the front and rear axles to 3 1/8" long from 1/4" walnut dowel stock. Glue the axles to the rims, with the ends of the axles flush with the *outside face* of each rim.

CONSTRUCT THE CHASSIS

1 Cut a piece of 1/2"-thick walnut (we planed 3/4" stock) to 2 1/2" x 7 3/4" long for the chassis (B).



Dab instant glue onto the joint between the tire and the laser-cut insert.

2 Mark the location, and dado on the bottom of the chassis, using the dimensions on the Chassis Side-View Drawing for reference.

3 Using the Side View for reference, mark the cutline for the taper along one edge at the front of the chassis blank. Bandsaw the taper.

4 Now, referring to the Top View Drawing, mark the shape of the chassis on the top surface of the walnut and cut the chassis to shape. Sand the chassis smooth.

5 Turn the chassis upside down. Center the axle assemblies from side to side on the chassis, and glue them into the dados.

NEXT, THE HOOD ASSEMBLY

1 To form the engine side-panel lamination (C), cut two pieces of 3/4" cherry stock to 1 1/4" x 4". With the edges and ends flush, glue and clamp together the two pieces.

2 Cut the hood (D) to the size listed in the Bill of Materials plus 2" in length. Glue and clamp the hood to

the engine side-panel lamination, with the edges and ends flush where shown on the drawing below. After the glue dries, trim both ends for a 2" finished length.

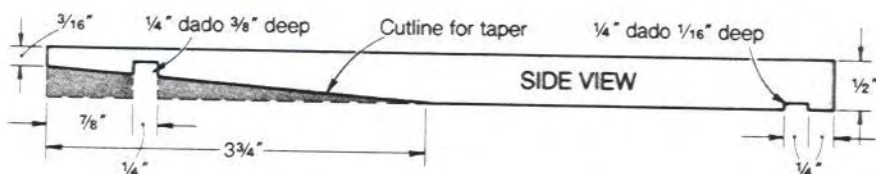
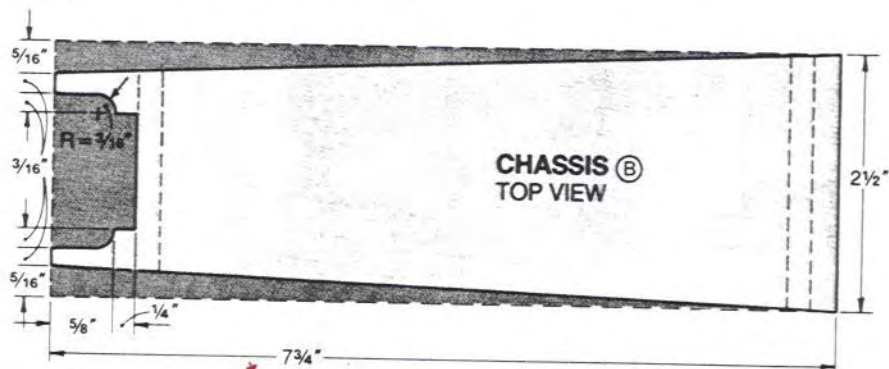
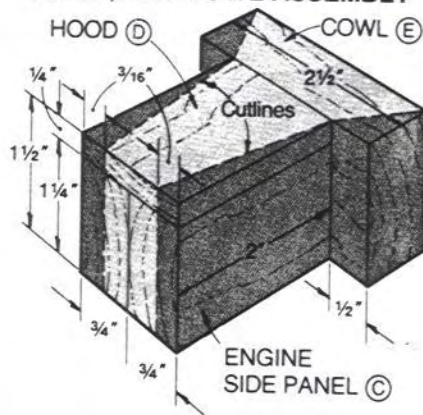
3 Cut the cowl (E) to size and glue it to the lamination where shown on the drawing below.

4 Mark the cutlines where shown on the drawing below, and bandsaw the sides of the assembly where marked. Sand smooth.

5 Rout or sand a 1/4" round-over along the top edges of the hood assembly where shown on the drawing on page 77.

6 With the front of the hood assembly flush with the notch in the chassis, glue the hood assembly to the chassis. Center the assembly from side to side on the chassis.

MAKING THE SIDE PANELS, HOOD, AND COWL ASSEMBLY



ON DOWN THE LINE, FORM THE FENDERS

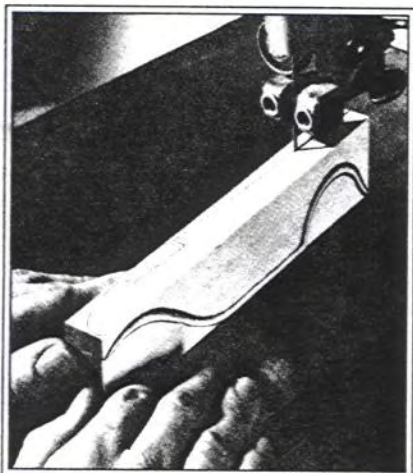
1 Cut two pieces of $\frac{3}{4}$ " walnut to $1\frac{3}{4} \times 8\frac{1}{2}$ " long for the fenders (F).

2 Transfer a full-sized side-view fender pattern to the *outside face* of each fender blank with carbon paper or by adhering a photocopy of the pattern to the stock. Transfer the right fender top view to one blank and the left fender top view to the other.

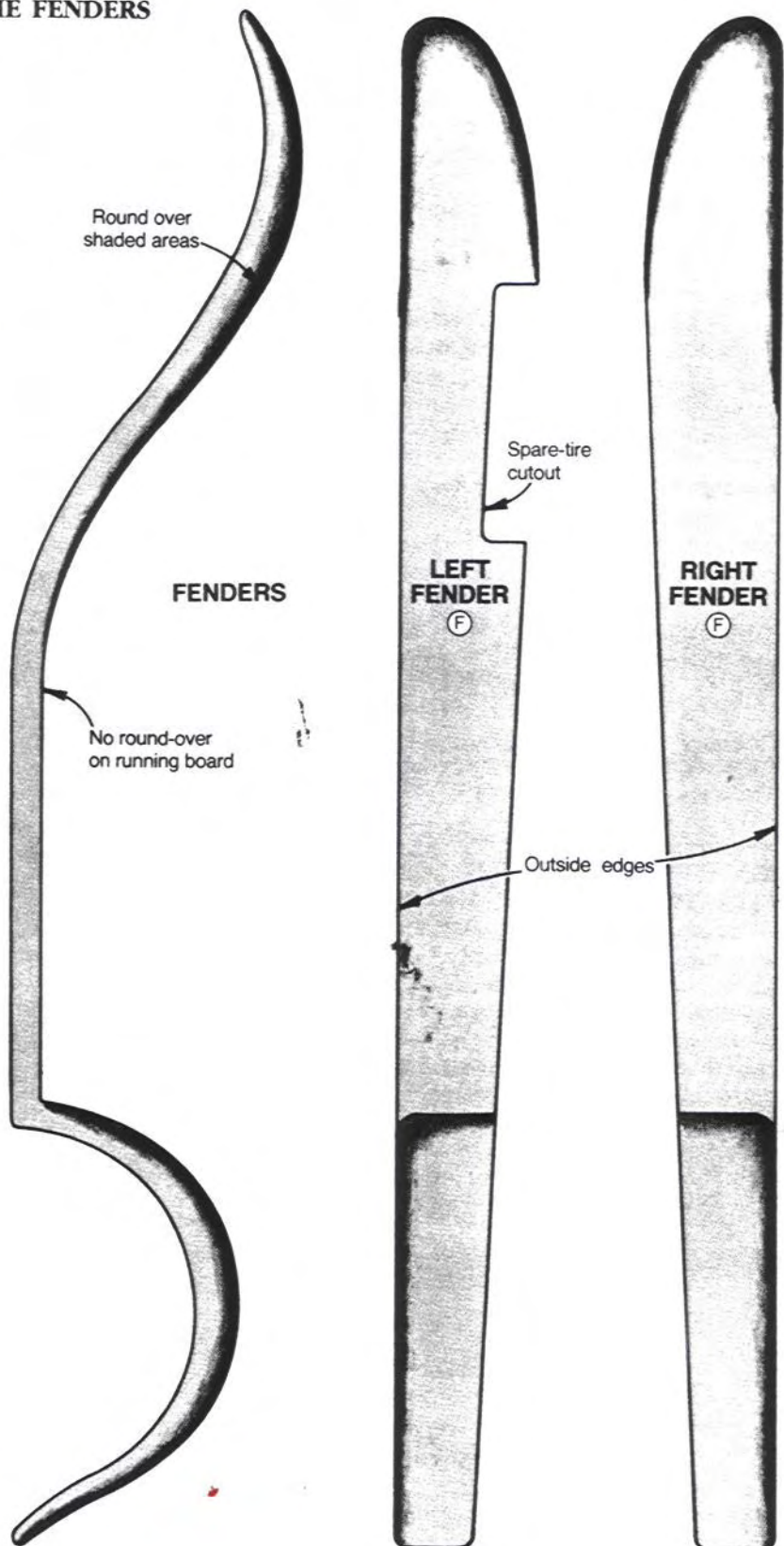
3 Bandsaw (we used a $\frac{1}{8}$ " blade) along the cutlines on the outside face of each fender. Then, tape the pieces together and cut along the marked top-view cutlines to finish cutting the fender to shape as shown in the photo *below*.

4 Carefully sand round-overs on each fender where shown on the Fenders Drawing at *right* and in the opening photo. (We used the drill-and-disc-sanding technique shown on page 53 to sand the fenders; you also could hand-sand them to shape.)

5 Position and tape the fenders to the chassis. Taping the fenders in place frees your hands to apply the glue. When locating the fenders, keep an even gap between the rear wheel and fender, and hold the bottom of the front fender $\frac{3}{16}$ " above the top of the tire. When properly taped in position, glue in place. Later, remove the tape.



We adhered a photocopy of the pattern to the fender blank with spray-on adhesive, and then cut the fender to shape.



Continued

THE CLASSIC WOODY

BODY BY YOU

1 From $\frac{1}{8}$ " cherry, cut the floor (H), firewall and tailgate (I), and side panels (J) to size.

2 Glue the floor in place directly behind the cowl and centered from side to side on the chassis.

3 While checking for square, glue the firewall to the back of the hood assembly and to the top of the floor. Now, glue the side panels and tailgate in place.

4 Cut the seat pieces (L, K) to the sizes listed in the Bill of Materials. Sand a $\frac{1}{8}$ " round-over on each where shown on the Hood and Body Assembly Drawing. Glue the pieces in place with the front edge of part K $\frac{3}{8}$ " from the firewall.

5 With the back edge of the spare tire even with the back edge of the cowl, glue the spare tire and rim in place against the chassis.

FREE LICENSE PLATE

To order, just send us a photograph of your Woody and a self-addressed, stamped, No. 10 business envelope to:

I Built a Woody
WOOD Magazine
Locust at 17th
Des Moines, IA 50336

Offer expires Oct. 15, 1990.

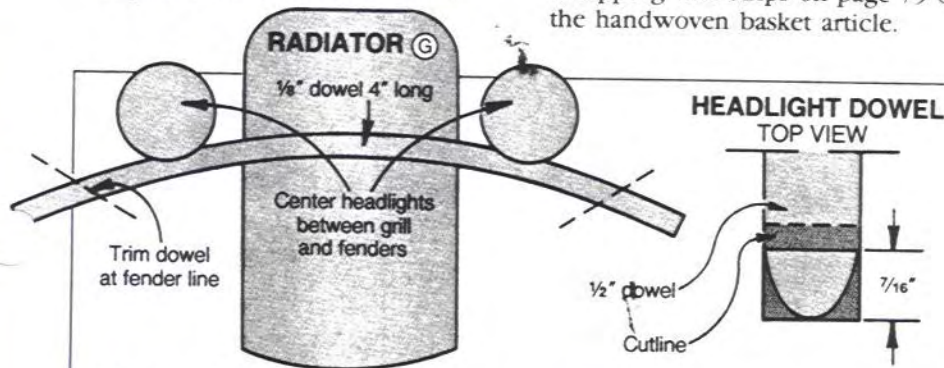
LET'S VISIT THE TRIM SHOP

1 From $\frac{1}{8}$ " maple stock, rip 3 strips $\frac{1}{8} \times \frac{1}{8} \times 24$ " long. See our method of ripping thin strips on page 79 of the handwoven basket article.

2 Cut bottom trim pieces (M, N) to length plus $\frac{1}{4}$ " from the 24"-long pieces. Sand one end of trim pieces M and N to conform to the fender. Glue trim pieces M and N in place.

3 Cut the maple window posts (O) to length. Mark centerlines on the outside face of the cherry side panels (J) where dimensioned on the Hood and Body Assembly Drawing at *right*. Glue the posts in position as shown in the photo on the opposite page. Sand the ends of four window posts to conform to the fender. Carefully align the top ends of the posts.

4 Cut the remaining trim pieces (P, Q, R, S, T, U) to the lengths listed in the Bill of Materials. Glue the remaining trim pieces in place.

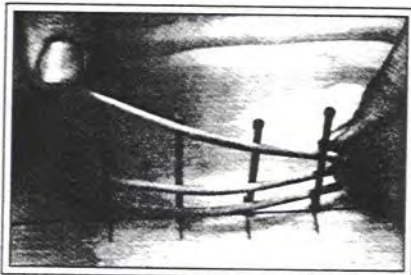


BRIGHT IDEAS FOR THE RADIATOR AND HEADLIGHTS

1 Transfer the full-sized radiator pattern to a piece of $\frac{1}{4}$ " maple. Cut the radiator (G) to shape. Hand-sand the radiator smooth.

2 Center the radiator against the front of the hood assembly and glue it in place.

3 Using a straightedge, mark a line the length of a piece of plywood. Mark four centerpoints 1" apart on the line where shown in the photo



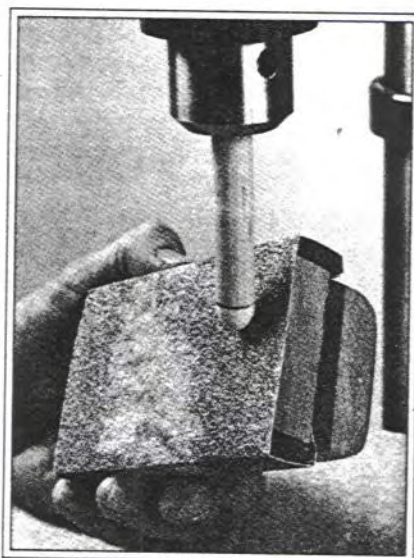
Soak $\frac{1}{2}$ " dowel stock in water, and then bend the dowels around the nails to shape the headlight bars.

below left. Drive a 6d nail at each of the four centerpoints.

4 Cut three pieces of $\frac{1}{8}$ " dowel stock to 4" long for the headlight bar. Soak the three pieces of dowel in hot water for one hour. Remove the dowels from the water and weave them in position as shown in the photo. Let the dowels dry overnight in the form.

5 Remove the dowels from the form. Save the dowel that retains the most curve. Position that dowel on the full-sized Radiator and Headlight Drawing and mark the cutlines. Trim the headlight bar where marked. Check the fit of the bar between the front fenders and sand for a flush fit.

6 From $\frac{1}{2}$ " dowel stock, cut a piece 6" long. Chuck the dowel in your drill press. With the drill press running at about 500 rpm, hold a pencil against the spinning dowel and mark a line $\frac{7}{16}$ " from the bottom end of the dowel. As shown in the

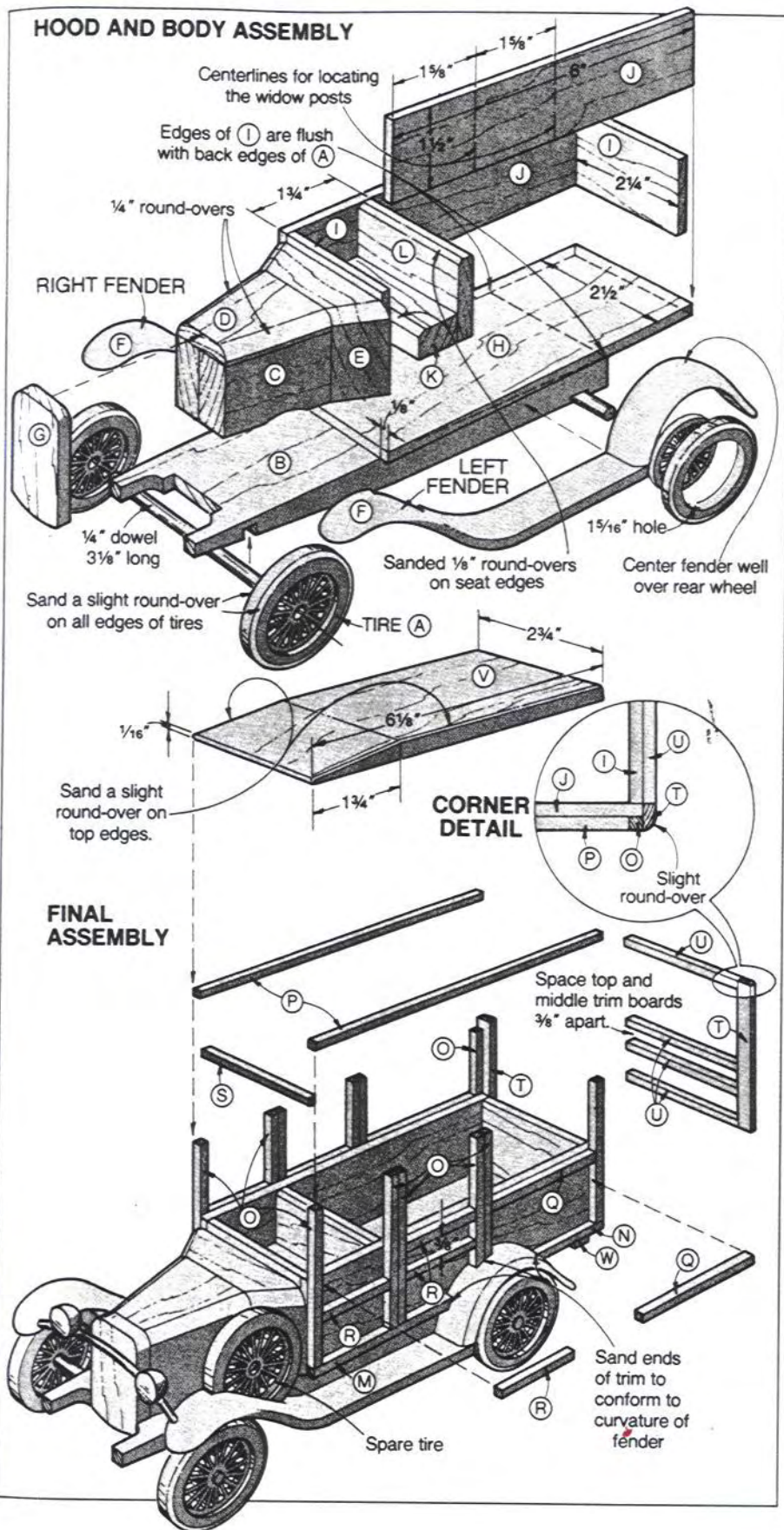


Chuck a $\frac{1}{2}$ " dowel into your drill press and sand the bottom end to form a headlight.

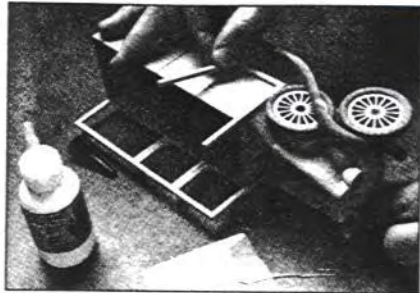
photo above, shape a headlight at the end of the dowel with a sanding block. See the Radiator and Headlight Drawing *above left* for reference. Remove the dowel from the drill press and trim the headlight where marked. Repeat the process to form a second headlight.

7 Glue the headlight bar in place between the fenders and against the radiator. Glue the headlights to the bar where shown on the Radiator and Headlight Drawing.

HOOD AND BODY ASSEMBLY



5 Cut the roof (V) to size and belt-sand a taper on the front top edge where dimensioned on the Final Assembly Drawing. Sand a slight round-over on the top edges of the roof where shown on the drawing. Glue the roof in place.



Position and glue one window post on each side of the marked lines.

6 Hand-sand a slight round-over along the back edges of the body where shown on the Corner Detail.

7 Cut the license block (W) to size and glue it to the floor.

PAINT IT, LICENSE IT, AND HIT THE ROAD

Apply the finish. Send us a photo of your Woody for a free, brass license plate (see the offer on the opposite page for details). Glue the license plate to the license block.

BUYING GUIDE

- **Instant glue kit (cyanoacrylate).** Hot Shot Special "T", bonds in 50 seconds, 2-oz. bottle. Solvent, 2-oz. bottle separates objects mistakenly bonded. One bottle of each for \$16.65 ppd. Garrett Wade, 161 Ave. of the Americas, New York, NY 10013 or call 800-221-2942.

- **Spoked inserts.** Six laser-cut Baltic birch inserts, 1 1/16" diameter, \$5.45 ppd. Custom Awards, 1427 NW. 81 St., Des Moines, IA 50311.

- **Hardwood.** Same-sized pieces and types of wood shown in the Cutting Diagram. \$19.75 ppd. (\$24.75 in Canada). EDLCO, P.O. Box 5373, Asheville, NC 28813, or call 704/255-8765 to order. ♣

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